Inflation vs. Bank CDs vs. The Mattress

The Stock Market Beats All Three Over Long Periods of Time

Tempted to stash your money in a bank CD? Or maybe under your mattress? Think either one of them will keep pace with inflation? Well consider the following:

Inflation

In simple terms, inflation is defined as an **increase** in the general level of prices for goods and services. Deflation, on the other hand, is defined as a **decrease** in the general level of prices for goods and services. If inflation is high, at say 10% – as it was in the 1970s – then a loaf of bread that costs $1 this year will cost $1.10 the next year.

Currently, the inflation rate in the US hovers right around 2%. Historically, inflation in the US has averaged 3.29% from 1914 until 2016, but it reached an all-time high of 23.70% in June 1920 and a record low of -15.80% in June 1921. Most will remember the high inflation rates of the 70s and early 80s when inflation hovered around 6% and occasionally reached double-digits.

So how does inflation affect your retirement savings? The answer is simple: inflation decreases the purchasing power of your money in the future. Consider this: at 3% inflation, $100 today will be worth $67.30 in 20 years – a loss of 1/3 its value. Said another way, that same $100 will only buy you $67.30 worth of goods and services in 20 years. And in 35 years? Well your $100 will be reduced to just $34.44.

Bank CDs

A certificate of deposit – a CD – is what's known as a time deposit account – a bank agrees to pay interest at a certain rate if savers deposit their cash for a set period of time. Generally speaking, the interest rate paid by the bank increases as the term (the length of time the bank has your money) increases. CDs are also insured by the Federal Deposit Insurance Corporation for banks and by the National Credit Union Administration for credit unions.

As the chart below shows, CD-yields have been in a steady decline for the past 30+ years:

[Please insert chart from bankrate.com]

More specifically, compare two dates from 1984 and 2017 to see the huge disparity:

	Jul. 3, 1984	Jan. 6, 2017
6-month CD yield	10.91%	0.16%
1-year CD yield	11.27%	0.27%
5-year CD yield	12.06%	0.86%

The Mattress

Surprisingly, we all know people who prefer to keep their savings under a mattress or in a shoe-box hidden away in a closet. But here is what my world-renowned study of every investor who hid their money under a mattress or in a shoe-box found:

Avg Annual Returns	Mattress	Shoe-Box
Last 5-years	0.0%	0.0%
Last 25-years	0.0%	0.0%
Last 100-years	0.0%	0.0%

Unfortunately, there was not enough data going back more than 100-years, but I suspect the returns would have been the same.

The Stock Market

If you are looking for average stock market returns over a long period of time, you are likely to get different numbers from different sources. This is because your answer really depends on a number of variables, including which index you review, whether dividends are included or not, whether the effects of inflation are calculated, etc.

Most financial professionals would agree, however, that the long-term data for the stock market points to an average annual return of about 7%. For the period 1950 to 2009, for example, if you adjust the S&P 500 for inflation and account for dividends, the average annual return comes out to exactly 7.0%. But if you invested in the S&P 500 from 2000 through 2009, your average annual return was -0.9%.

Take a look at the 10-year annualized percentage returns for the S&P 500 Index, US Large Cap Value, US Small Cap and US Small Cap Value for the decades since the 1930s *(figure 1.3).*

And let's not forget what 2016 brought investors:

- The DJIA gained 13.5%
- The S&P 500 rose 9.4%
- NASDAQ rose 7.5%.

What Investors Need to Remember

Although there are times when buying a CD might be appropriate, generally speaking, buying CDs should not be part of your long-term retirement strategy – unless you happen to be very close to retirement age. CD rates today just don't keep pace with inflation. And putting your money under a mattress is worse (and probably uncomfortable too).

Instead, I encourage you to explore the thousands of financial products that provide better options. And remember that over long-periods of time, the stock market has outpaced inflation, today's CD yields and hiding your money under your mattress. But before you invest in anything, consider the risk/reward tradeoff, your goals and your time horizon – and call my office to discuss.

DECADE RETURNS 1930 THROUGH 2009

Asset Class:	30-39	40-49	50-59	60-69	70-79	80-89	90-99	00-09
S&P 500 Index	-.1	9.2	19.4	7.8	5.9	17.5	18.2	-.9
Large-Cap Value	-5.7	12.7	18.4	9.4	12.9	20.6	16.8	4.1
Small-Cap	2.3	14.9	19.2	13.0	9.2	16.8	15.5	9.0
Small-Cap Value	-2.6	19.8	19.6	14.4	14.4	20.1	16.2	12.8

Includes reinvestment of dividends. Source: Dimensional Fund Advisors.

Figure 1.3